

# **Synerzine 3(2H)-Furanone, 4-(acetyloxy)-2,5-dimethyl-**Safety Data Sheet acording to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 05/29/2015 Version: 1.0

SECTION 1: Identification	
1.1. Identification	
Product form	: Substance
Substance name	: 3(2H)-Furanone, 4-(acetyloxy)-2,5-dimethyl-
CAS-No.	: 4166-20-5
Product code	: (US) W01314
Formula	: C8H10O4
Synonyms	: Furan-3(2H)-one, 4-(acetyloxy)-2,5-dimethyl- / 4-Acetoxy-2,5-dimethylfuran-3(2H)-one / Caramel acetate / 4-Acetoxy-2,5-dimethyl-3(2H)furanone / 3(2H)-Furanone, 4-(acetyloxy)-2.5-dimethyl-
1.2. Recommended use and restricti	ons on use
No additional information available	
1.3. Supplier	
Synerzine	
5340 Hwy 42 S	
Ellenwood, Georgia 30294 - USA	
T 404-524-6744 - F 404-577-1651 info@synerzine.com - www.synerzine.com	
1.4. Emergency telephone number	
Emergency number	: Infotrac 1-800-535-5053 (Contract# 102471) Dial +1-352-323-3500 when outside the US
SECTION 2: Hazard(s) identification	on
2.1. Classification of the substance	or mixture
GHS-US classification	
Acute toxicity (oral) H302	Harmful if swallowed
Category 4	
Full text of H statements : see section 16	
2.2. GHS Label elements, including p	precautionary statements
GHS-US labeling	
Hazard pictograms (GHS-US)	
Signal word (GHS-US)	: Warning
Hazard statements (GHS-US)	: H302 - Harmful if swallowed
Precautionary statements (GHS-US)	: P264 - Wash hands, forearms and face thoroughly after handling.
	P270 - Do not eat, drink or smoke when using this product.
	P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell
	P330 - Rinse mouth.
	P501 - Dispose of contents/container to an approved waste disposal plant
2.3. Other hazards which do not res	ult in classification
No additional information available	
2.4. Unknown acute toxicity (GHS U	S)
Natanniachta	

#### Not applicable

2

## SECTION 3: Composition/Information on ingredients

Name	Product identifier	%	GHS-US classification
3(2H)-Furanone, 4-(acetyloxy)-2,5-dimethyl- (Main constituent)	(CAS-No.) 4166-20-5	95 - 100	Acute Tox. 4 (Oral), H302

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of hazard classes and H-statements : see se	ction 16
3.2. Mixtures	
Not applicable	
SECTION 4: First-aid measures	
4.1. Description of first aid measures	
-	: Call a poison center/doctor/physician if you feel unwell.
	: Remove person to fresh air and keep comfortable for breathing.
	: Wash skin with plenty of water.
-	<ul> <li>Rinse eyes with water as a precaution.</li> <li>Rinse mouth. Call a poison center/doctor/physician if you feel unwell.</li> </ul>
4.2. Most important symptoms and ef	
No additional information available	
4.3. Immediate medical attention and	special treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extingu	ishing media
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from the	chemical
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
5.3. Special protective equipment and	l precautions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release mea	sures
6.1. Personal precautions, protective	equipment and emergency procedures
6.1.Personal precautions, protective6.1.1.For non-emergency personnel	equipment and emergency procedures
6.1.1. For non-emergency personnel	<ul> <li>equipment and emergency procedures</li> <li>: Ventilate spillage area.</li> </ul>
6.1.1. For non-emergency personnel	
<b>6.1.1.</b> For non-emergency personnel Emergency procedures	
6.1.1.For non-emergency personnelEmergency procedures6.1.2.For emergency responders	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer</li> </ul>
<ul> <li>6.1.1. For non-emergency personnel Emergency procedures</li> <li>6.1.2. For emergency responders Protective equipment</li> </ul>	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer</li> </ul>
6.1.1.For non-emergency personnelEmergency procedures6.1.2.For emergency respondersProtective equipment6.2.Environmental precautions	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
6.1.1. For non-emergency personnel         Emergency procedures         6.1.2. For emergency responders         Protective equipment         6.2. Environmental precautions         Avoid release to the environment.         6.3. Methods and material for contain	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
6.1.1. For non-emergency personnel         Emergency procedures         6.1.2. For emergency responders         Protective equipment         6.2. Environmental precautions         Avoid release to the environment.         6.3. Methods and material for contain         Methods for cleaning up	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> </ul>
6.1.1. For non-emergency personnel         Emergency procedures         6.1.2. For emergency responders         Protective equipment         6.2. Environmental precautions         Avoid release to the environment.         6.3. Methods and material for contain         Methods for cleaning up	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>Imment and cleaning up</li> <li>Take up liquid spill into absorbent material.</li> </ul>
<ul> <li>6.1.1. For non-emergency personnel Emergency procedures</li> <li>6.1.2. For emergency responders Protective equipment</li> <li>6.2. Environmental precautions Avoid release to the environment.</li> <li>6.3. Methods and material for contain Methods for cleaning up Other information</li> </ul>	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>Imment and cleaning up</li> <li>Take up liquid spill into absorbent material.</li> </ul>
6.1.1.For non-emergency personnelEmergency procedures6.1.2.For emergency respondersProtective equipment6.2.Environmental precautionsAvoid release to the environment.6.3.Methods and material for containMethods for cleaning upOther information6.4.Reference to other sections	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>Imment and cleaning up</li> <li>Take up liquid spill into absorbent material.</li> </ul>
<ul> <li>6.1.1. For non-emergency personnel Emergency procedures</li> <li>6.1.2. For emergency responders Protective equipment</li> <li>6.2. Environmental precautions Avoid release to the environment.</li> <li>6.3. Methods and material for contain Methods for cleaning up Other information</li> <li>6.4. Reference to other sections For further information refer to section 13.</li> </ul>	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>Imment and cleaning up</li> <li>Take up liquid spill into absorbent material.</li> </ul>
<ul> <li>6.1.1. For non-emergency personnel Emergency procedures</li> <li>6.1.2. For emergency responders Protective equipment</li> <li>6.2. Environmental precautions Avoid release to the environment.</li> <li>6.3. Methods and material for contain Methods for cleaning up Other information</li> <li>6.4. Reference to other sections For further information refer to section 13.</li> <li>SECTION 7: Handling and storage</li> <li>7.1. Precautions for safe handling</li> </ul>	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>Imment and cleaning up</li> <li>Take up liquid spill into absorbent material.</li> </ul>
6.1.1.For non-emergency personnelEmergency procedures6.1.2.For emergency respondersProtective equipment6.2.Environmental precautionsAvoid release to the environment.6.3.Methods and material for containMethods for cleaning upOther information6.4.Reference to other sectionsFor further information refer to section 13.SECTION 7: Handling and storage7.1.Precautions for safe handling	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>ment and cleaning up</li> <li>Take up liquid spill into absorbent material.</li> <li>Dispose of materials or solid residues at an authorized site.</li> </ul>
6.1.1.For non-emergency personnelEmergency procedures6.1.2.For emergency respondersProtective equipment6.2.Environmental precautionsAvoid release to the environment.6.3.Methods and material for containMethods for cleaning upOther information6.4.Reference to other sectionsFor further information refer to section 13.SECTION 7: Handling and storage7.1.Precautions for safe handling	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>ment and cleaning up</li> <li>Take up liquid spill into absorbent material.</li> <li>Dispose of materials or solid residues at an authorized site.</li> <li>Ensure good ventilation of the work station. Wear personal protective equipment.</li> <li>Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>
<ul> <li>6.1.1. For non-emergency personnel Emergency procedures</li> <li>6.1.2. For emergency responders Protective equipment</li> <li>6.2. Environmental precautions Avoid release to the environment.</li> <li>6.3. Methods and material for contain Methods for cleaning up Other information</li> <li>6.4. Reference to other sections For further information refer to section 13.</li> <li>SECTION 7: Handling and storage</li> <li>7.1. Precautions for safe handling Precautions for safe handling Hygiene measures</li> <li>7.2. Conditions for safe storage, inclu</li> </ul>	<ul> <li>Ventilate spillage area.</li> <li>Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>ment and cleaning up</li> <li>Take up liquid spill into absorbent material.</li> <li>Dispose of materials or solid residues at an authorized site.</li> <li>Ensure good ventilation of the work station. Wear personal protective equipment.</li> <li>Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>
<ul> <li>6.1.1. For non-emergency personnel Emergency procedures</li> <li>6.1.2. For emergency responders Protective equipment</li> <li>6.2. Environmental precautions Avoid release to the environment.</li> <li>6.3. Methods and material for contain Methods for cleaning up Other information</li> <li>6.4. Reference to other sections For further information refer to section 13.</li> <li>SECTION 7: Handling and storage</li> <li>7.1. Precautions for safe handling Precautions for safe handling Hygiene measures</li> <li>7.2. Conditions for safe storage, inclu</li> </ul>	<ul> <li>: Ventilate spillage area.</li> <li>: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>: Take up liquid spill into absorbent material.</li> <li>: Dispose of materials or solid residues at an authorized site.</li> <li>: Ensure good ventilation of the work station. Wear personal protective equipment.</li> <li>: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> <li>: ding any incompatibilities</li> <li>: Store in a well-ventilated place. Keep cool.</li> </ul>
<ul> <li>6.1.1. For non-emergency personnel Emergency procedures</li> <li>6.1.2. For emergency responders Protective equipment</li> <li>6.2. Environmental precautions Avoid release to the environment.</li> <li>6.3. Methods and material for contain Methods for cleaning up Other information</li> <li>6.4. Reference to other sections For further information refer to section 13.</li> <li>SECTION 7: Handling and storage</li> <li>7.1. Precautions for safe handling Hygiene measures</li> <li>7.2. Conditions for safe storage, inclustorage conditions</li> </ul>	<ul> <li>: Ventilate spillage area.</li> <li>: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".</li> <li>: Take up liquid spill into absorbent material.</li> <li>: Dispose of materials or solid residues at an authorized site.</li> <li>: Ensure good ventilation of the work station. Wear personal protective equipment.</li> <li>: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> <li>: ding any incompatibilities</li> <li>: Store in a well-ventilated place. Keep cool.</li> </ul>

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.2. Appropriate engineering controls	
Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### **Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties	
9.1. Information on basic physical	and chemical properties
Physical state	: Liquid
Appearance	: A clear viscous liquid.
Color	: colorless
Odor	: powerful candy floss and burnt sugar
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 243 °C
Flash point	: > 235 °F TCC
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 1.16 - 1.17 g/ml
Molecular mass	: 170 g/mol
Solubility	: soluble in alcohols. soluble in water.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

#### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

use.
s (see section 7).
omposition products should not be produced.
classified
0-5)
ng/kg body weight
classified

	III	the environment.
12.2.	Persistence and degradability	
No addit	litional information available	
12.3.	Bioaccumulative potential	
No addi	ditional information available	
12.4.	Mobility in soil	
No addit	litional information available	
12.5.	Other adverse effects	

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects

No additional information available

Ecology - general

SECTION 13: Disposal considerations		
13.1. Disposal methods		
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.	

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## SECTION 14: Transport information

#### **Department of Transportation (DOT)**

In accordance with DOT

Other information

: No supplementary information available.

#### **Transportation of Dangerous Goods**

#### **Transport by sea**

#### Air transport

## SECTION 15: Regulatory information

#### 15.1. US Federal regulations

No additional information available

#### 15.2. International regulations

#### **CANADA**

3(2H)-Furanone, 4-(acetyloxy)-2,5-dimethyl- (4166-20-5)

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

3(2H)-Furanone, 4-(acetyloxy)-2,5-dimethyl- (4166-20-5)

Listed on ELINCS (European List of Notified Chemical Substances)

#### National regulations

#### 3(2H)-Furanone, 4-(acetyloxy)-2,5-dimethyl- (4166-20-5)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

#### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

Full text of H-phrases:	
H302	Harmful if swallowed
NFPA health hazard	: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
Hazard Rating	
Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 0 Minimal Hazard - Materials that will not burn
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection	: B
	B - Safety glasses, Gloves
06/22/2018	EN (English US) 5/6

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### Synerzine US

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product